	Application No.	Applicant(s)	
Notice of Allowability	09/941,420	MEIFU ET AL.	
	Examiner	**Art Unit**	
	Joseph R. Maniwang	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _07/19/05_.

2. ☒ The allowed claim(s) is/are _3-9,11-15,19-23,25,27,28 and 30-47_.

3. ☒ The drawings filed on _23 March 2001_ are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☒ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _20050726_ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

MARC D. THOMPSON
MARC THOMPSON
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview

with Brian S. Myers (Reg. No. 46,947) on 07/26/05.

3.   The application has been amended as follows:

Claims:

Claim 12:

The A server apparatus for a space information service comprising:

an information bubble managing unit for managing bubble data in which space

range information·including position information in a real physical space is correlated

with supply information in order to virtually register an information bubble related with

said desired supply information in said real physical space;

an extracting unit for extracting supply information of bubble data including

retrieval object space range information based on position information on a user

terminal from said information bubble managing unit;

a providing unit for providing said supply information extracted by said extracting

unit to said user terminal; and

an information bubble movement control unit for updating at least position

information of said bubble data to virtually move said information bubble in said real

physical space, said information bubble movement control unit including

an information bubble behavior setting unit for setting behavior data defining

behavior of said information bubble in said real physical space, and

an information bubble moving unit for updating position information of said

bubble data on the basis of said behavior data set by said information bubble behavior

setting unit to move said information bubble according to said behavior data,

wherein said information bubble behavior setting unit including a condition setting

unit for setting condition data with respect to a time to move said information bubble to a

specific position in said real physical space as said behavior data, and

said information bubble moving unit including a second information bubble

position updating unit for updating position information of said bubble data to position

information on said specific position at a time defined by said condition data, and

where said condition setting unit sets data with respect to an available period to

move said information bubble as said condition data.

Claim 13:

The A server apparatus for a space information service comprising:

an information bubble managing unit for managing bubble data in which space

range information including position information in a real physical space is correlated

with supply information in order to virtually register an information bubble related with

said desired supply information in said real physical space;

an extracting unit for extracting supply information of bubble data including

retrieval object space range information based on position information on a user

terminal from said information bubble managing unit;

a providing unit for providing said supply information extracted by said extracting

unit to said user terminal; and

an information bubble movement control unit for updating at least position

information of said bubble data to virtually move said information bubble in said real

physical space, said information bubble movement control unit including

an information bubble behavior setting unit for setting behavior data defining

behavior of said information bubble in said real physical space, and

an information bubble moving unit for updating position information of said

bubble data on the basis of said behavior data set by said information bubble behavior

setting unit to move said information bubble according to said behavior data,

wherein said information bubble behavior setting unit including a condition setting

unit for setting condition data with respect to a time to move said information bubble to a

specific position in said real physical space as said behavior data, and

said information bubble moving unit including a second information bubble

position updating unit for updating position information of said bubble data to position

information on said specific position at a time defined by said condition data, and

wherein said information bubble managing unit includes a supply information updating unit for updating said supply information according to upload information about said supply information received form one or more of user terminals having used said space information service and received said supply information.

Allowable Subject Matter

4.   Claims 3-9; 11-15, 19-23, 25, 27, 28, and 30-47 are allowed.

5.   The following is an examiner's statement of reasons for allowance:

6.   The provision for a space information service comprising an information bubble managing unit for managing bubble data in which space range information including position information in a real physical space is correlated with supply information in order to virtually register an information bubble related with said desired supply information in said real physical space; an extracting unit for extracting supply information of bubble data including retrieve object space range information based on position information on a user terminal from said information bubble managing unit; a providing unit for providing said supply information extracted by said extracting unit to said user terminal; and an information bubble movement control unit for updating at least position information of said bubble data to virtually move said information bubble in said real physical space, said information bubble movement control unit including an information bubble behavior setting unit for setting behavior data defining behavior of said information bubble in said real physical space, and an information bubble moving unit for updating position information of said bubble data on the basis of said behavior

data set by said information bubble behavior setting unit to move said information

bubble according to said behavior data (see Specification, p. 23, line 22 through p. 34,

line 8; p. 32, lines 5-17; p. 32, lines 18-22; p. 60, line 24 through p. 63, line 19; Fig. 2), in

combination with the following limitations in separate embodiments is not fairly taught or

suggested by the prior art of record:

7.   wherein said information bubble behavior setting unit including a random number

generating unit for generating a random number with respect to position information of

said bubble data as behavior data, and said information bubble moving unit including a

first information bubble position updating unit for randomly updating position information

of said bubble data with the random number generated by said random number

generating unit to randomly move said information bubble in said real physical space

(see Specification, p. 61, lines 5-27);

8.   wherein said information bubble behavior setting unit includes a condition setting

unit for setting condition data with respect to a time to move said information bubble to a

specific position in said real physical space as said behavior data, said information

bubble behavior setting unit sets an initial registered position for said information bubble

as said specific position, and said information bubble moving unit includes a second

information bubble position updating unit for updating position information of said bubble

data to position information on said specific position at a time defined by said condition

data (see Specification, p. 62, line 20 through p. 63, line 19);

9.   wherein said information bubble behavior setting unit including a condition setting

unit for setting condition data with respect to a time to move said information bubble to a

specific position in said real physical space as said behavior data, and said information

bubble moving unit including a second information bubble position updating unit for

updating position information of said bubble data to position information on said specific

position at a time defined by said condition data, and where said condition setting unit

sets data with respect to an available period to move said information bubble as said

condition data (see Specification, p. 62, line 20 through p. 63, line 19);

10.   wherein said information bubble behavior setting unit including a condition setting

unit for setting condition data with respect to a time to move said information bubble to a

specific position in said real physical space as said behavior data, and said information

bubble moving unit including a second information bubble position updating unit for

updating position information of said bubble data to position information on said specific

position at a time defined by said condition data, and wherein said information bubble

managing unit includes a supply information updating unit for updating said supply

information according to upload information about said supply information received from

one or more of user terminals having used said space information service and received

said supply information (see Specification, p. 62, line 20 through p. 63, line 19; p. 58,

line 27 through p. 59, line 15);

11.   wherein said information bubble behavior setting unit including a condition setting

unit for setting condition data with respect to a time to move said information bubble to a

specific position in said real physical space as said behavior data, and said information

bubble moving unit including a second information bubble position updating unit for

updating position information of said bubble data to position information on said specific

position at a time defined by said condition data, and wherein said information bubble

managing unit includes a supply information updating unit for updating said supply

information according to update information about said supply information from a user

terminal having received said supply information, and wherein said condition setting unit

sets data with respect to the number of times of update of said supply information by

said supply information updating unit as said condition data (see Specification, p. 62,

line 20 through p. 63, line 19; p. 58, line 27 through p. 59, line 15).

12.   The provision for a space information service comprising an information bubble

managing unit for managing bubble data in which space range information including

position information in a real physical space is correlated with supply information in

order to virtually register an information bubble related with said desired supply

information in said real physical space; an extracting unit for extracting supply

information of bubble data including retrieve object space range information based on

position information on a user terminal from said information bubble managing unit; a

providing unit for providing said supply information extracted by said extracting unit to

said user terminal; and an information bubble movement control unit for updating at

least position information of said bubble data to virtually move said information bubble in

said real physical space, wherein said information bubble managing unit includes a

supply information updating unit for updating said supply information according to

upload information about said supply information received from one or more of user

terminals having used said space information service and received said supply

information is not fairly taught or suggested by the prior art of record. Support for this

functionality can be found in the Specification, p. 23, line 22 through p. 34, line 8; p. 32,
lines 5-17, 18-22; p. 60, line 24 through p. 63, line 19; p. 58, line 27 through p. 59, line
15).

13.   The provision for providing a space information service comprising the steps of
an information bubble registering step of registering bubble data in which space range
information including position information in a real physical space is correlated with
supply information in order to virtually register an information bubble related with said
desired supply information in said real physical space; an information bubble moving
step of updating at least position information of said bubble data to virtually move said
information bubble in said real physical space; an extracting step of extracting supply
information of bubble data including retrieval object space range information based on
position information on a user terminal; and a providing step of providing said supply
information extracted at said extracting step to said user terminal (see Specification, p.
p. 23, line 22 through p. 34, line 8; p. 60, line 24 through p. 63, line 19; p. 32, line 5-17,
18-22), in combination with the following limitations in separate embodiments is not
fairly taught or suggested by the prior art of record:

14.   wherein at said information bubble moving step, position information of said
bubble data is updated using a random number to randomly move said information
bubble in said real physical space (see Specification, p. 61, lines 5-27);

15.   wherein at said information bubble moving step, position information of said
bubble data is updated to specific position information when a predetermined period is
elapsed after a start of movement of said information bubble to move said information

bubble to a specific position in said real physical space, and wherein at said information

bubble moving step, position information of said bubble data is updated to specific

position information when the number of times of update of said supply information by

user terminals having received said supply information reaches a predetermined

number of times after a start of movement of said information bubble to move said

information bubble to a specific position in real physical space (see Specification, p. 58,

line 27 through p. 59, line 15);

16.   wherein at said information bubble moving step, position information of said

bubble data is updated to specific position information when the number of times of

update of said supply information by a user terminal having received said supply

information reaches a predetermined number of times after a start of movement of said

information bubble to move said information bubble to a specific position in said real

physical space (see Specification, p. 58, line 27 through p. 59, line 15).

17.   Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph R. Maniwang whose telephone number is (571)

272-3928. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JM

MARC D. THOMPSON
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PRIMARY EXAMINER